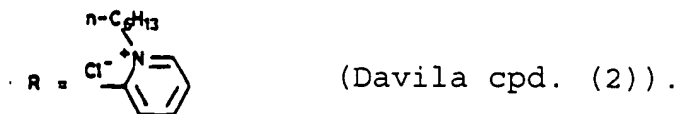
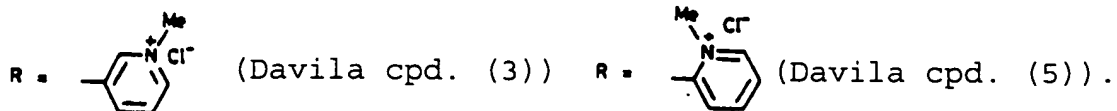


It is now well settled that an obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the relevant art to make the claimed compound in the expectation that it will have properties similar to those of the prior compound. In re Payne, 203 USPQ 245 (CCPA 1979). Equally well settled is the fact that a presumption of obviousness based on a prior disclosure of a structurally similar compound can be overcome where there is evidence showing that there is no reasonable expectation of similar properties in the structurally similar compounds. In re May, 197 USPQ 601 (CCPA 1978).

Davila et al relates to the use of sterically hindered zinc porphyrins for solar-energy conversion. As the Examiner notes, Davila et al teaches a meso substituted porphyrin wherein the meso substituent is :



Davila et al also teaches meso substituted porphyrins wherein the meso substituents are:



On page 525, right column, Davila et al states, in relevant part, that compound (2) is:

stable in aqueous nitric acid solutions at pH=0, showing no signs of zinc demetallation after one week.

This compares very favourably with the short half lives for the zinc demetallation found for the less sterically-hindered porphyrins, (3) ... and (5) in 1M nitric acid ...

(emphasis added).

At page 526, right column, Davila et al concludes that:

The improved stability of the porphyrin radical cations and anions reported here ... suggests that ... (2) might function as [a] useful [photosensitiser] for reversible water oxidation and reduction in oxygen and hydrogen, respectively.

While in no way acknowledging that the compounds of the instant claims are structurally similar to compound (2) of Davila et al (the compound of the citation upon which the Examiner relies in rejecting the claims as obvious), Applicants nonetheless point out that the claimed compounds, like compounds (3) and (5) of Davila et al, are less sterically hindered than Davila et al compound (2). Given Davila et al's clear showing of advantage of the more sterically hindered compound for the purpose taught, one

skilled in the art would have found no motivation in the citation to make the claimed compounds and certainly no basis for expecting that the claimed compounds would have properties similar to those of Davila et al compound (2). That being the case, withdrawal of the rejection is clearly in order and same is requested.

Reconsideration is requested.

Claims 28-59 stand rejected under 35 USC 112, second paragraph, as allegedly being indefinite. Withdrawal of the rejection is in order for the reasons that follow.

The Examiner contends that the phrase "Z" is a counterion" is indefinite. Respectfully, such is not the case. One skilled in the art would have no difficulty appreciating the meaning of this commonly used the phrase. That such is the case is evidenced by the fact that a search of the PTO claims database for the term "counterion" results in 1195 hits, the earliest of the patents revealed having issued in 1976 (as the Examiner is aware, patents from 1790-1975 are searchable only by patent number and classification):

Given that the phrase used is clearly one well recognized in the art, no revision should be necessary and none has been made.

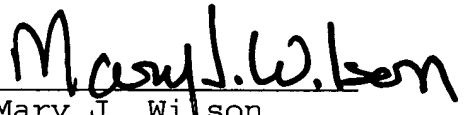
The Examiner is requested to initial and return the
PTO 1449 Forms submitted June 14, 2001.

This application is submitted to be in condition for
allowance and a Notice to that effect is requested.

Respectfully submitted,

NIXON & VANDERHYE, P.C.

By


Mary J. Wilson
Reg. No. 32,955

MJW:tat

1100 North Glebe Road
8th Floor
Arlington, Virginia 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100